

REMARKS

The Examiner objected to Claims 1-4 and 11-12 because of two informalities. The above amendments correct these problems.

The Examiner rejected Claims 1-9 under 35 U.S.C. 102(e) as being anticipated by Endo (US 2004 / 0246285 A1). Applicant traverses this rejection.

In making this rejection, the Examiner maintains that sensor 29 taught in Endo is an imaging device that forms an image of a portion of an image of the print medium. The Examiner bases this conclusion on the fact that sensor 29 detects various edges of the print medium. The mere fact that the sensor detects the edge of the print medium does not prove that the sensor forms an image of a portion of one of the edges. A blind person can detect the edge of a curb without forming an image of the edge. The American Heritage Dictionary defines an image as "An optically formed duplicate, counterpart, or other representative reproduction of an object, especially an optical reproduction formed by a lens or mirror". The Examiner has not pointed to any teaching in Endo that sensor 29 forms an image of anything, no less the edge of the print medium.

The Examiner attempts to overcome these shortcomings in the Examiner's argument by stating that Applicant's apparatus uses a single photodetector 14, and hence, is the same as that taught in Endo. Applicant must disagree with the Examiner's reading of the present application. The specification of the present application refers to a single position detector 14 that includes an imaging array, and all embodiments taught in the specification of that detector include multiple photodetectors. In particular, the specification teaches embodiments using one dimensional and two-dimensional imaging arrays.

The Examiner goes on to maintain that the photodetector in the present application measures light and dark regions to determine the positions of the edges of the print medium, and hence, Applicant has defined imaging to be such processing. First, Applicant must point out that absent a clear definition to the contrary, the terms in a patent application are given their ordinary meaning in the art. The Examiner has not pointed to any such clear definition that makes it clear that Applicant intends to define the term image differently from the

ordinary meaning of the term. Second, the light and dark regions in questions are within the image of the edges of the print medium, not merely light and dark regions as detected by a single photodetector as it crosses an edge.

Hence, the Examiner has not shown that each of the limitations of Claims 1 and 5 is present in Endo. Accordingly, Applicant submits that Claims 1 and 5 and the claims dependent therefrom are not anticipated by Endo.

With regards to Claims 2 and 8, the Examiner stated that the controller determines a brightness value for the print medium from the image. First, as noted above, Endo does not teach forming an image. Second, the cited paragraph refers to measuring the output of the photosensor, not determining a brightness value for the print medium. The brightness value depends on the absolute intensity of the light source and the gain of the photosensor. Hence, there are additional grounds for allowing Claim 2.

The Examiner rejected Claim 10 under 35 U.S.C. 103(a) as being unpatentable over Endo in view of Wen (US 6,109,745). Applicant traverses this rejection.

In making this rejection, the Examiner stated that Endo discloses everything claimed with the exception of determining the length and width of the print medium from a plurality of images of portions of an edge. The Examiner looks to Wen as teaching a sensor that determines the length and width of the print medium from a plurality of images of portions of the print medium. According to the Examiner, one would be motivated to include the sensor of Wen in the device of Endo to determine the size of the print medium during image processing.

It should be noted that Wen teaches a printing device having a moving image sensor that moves independent of the printing mechanism that consists of an inkjet printing bar. Hence, the combination of the teachings of the two references is a printer that has two moving assemblies, one that moves the image sensor and one that moves the print head. This is not the present invention as claimed in Claim 10. Furthermore, the device of Endo can already determine the size of the print medium by using the measured positions of the various edges; hence, there is no motivation to add a separate device for providing this function.

Accordingly, Applicant submits that the Examiner has not made a *prima facia* case for obviousness with respect to Claim 10.

The Examiner rejected Claims 11 and 12 under 35 U.S.C. 103(a) as being unpatentable over Endo in view of Miyakawa (US 4,617,580). Applicant traverses this rejection.

In making this rejection, the Examiner stated that Endo discloses everything claimed with the exception of dispensing a quantity of ink at one point on said print medium, wherein said quantity depends on a determined brightness. The Examiner looks to Miyakawa as providing the missing teaching. First, as noted above, Endo does not teach the imaging limitation of the claims in question. Second, contrary to the Examiner's assertion, Miyakawa does not teach altering the amount of ink dispensed based on a determination of the brightness of the print medium. Miyakawa teaches changing the quantity of ink dispensed based on whether the print medium is transparent. The system taught in Miyakawa at the cited passage does not measure the amount of light reflected from the medium, i.e., the brightness. The sensors measure the amount of light that is transmitted by the medium. It should be noted that the system taught in Miyakawa dispenses the same amount of ink on a black piece of paper that it dispenses on a white pieces of paper. Hence, Applicant submits that the Examiner has not made a *prima facia* case for obviousness with respect to Claims 11 and 12.

If the Examiner maintains the above rejections, Applicant respectfully requests that the Examiner agree to enter the above amendments to the claims upon the filing of a Notice of Appeal. In this regard, these amendments place the claims in better condition for an appeal by removing minor problems that do not alter the scope or definiteness of the claims.

I hereby certify that this paper is being sent by FAX to 571-273-8300.

Respectfully Submitted,



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